

REMARKS

The Examiner objects to the disclosure of the Application for the use of claim numbers therein. The Applicant would like to respectfully bring the Examiner's attention to the Preliminary Amendment filed October 29, 2003 wherein the Applicant addressed and amended such informalities. Having previously amended all informalities in the disclosure of the nature identified by the Examiner, the Applicant therefore respectfully requests that the Examiner reconsider and withdraw all such objections to the disclosure.

Next, claims 8-16 are presently pending in the Application and the Examiner rejects claims 9 and 11 under 35 U.S.C. § 112 and claims 8-10 and 12-14 under 35 U.S.C. § 102 over prior art cited by the Examiner. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

First considering the rejections of claims under 35 U.S.C. § 112, the Examiner rejects claim 9 under 35 U.S.C. § 112, second paragraph, failing to particularly point out and distinctly claim the subject matter of the invention, and particularly with regard to the term "area". The Examiner also rejects claim 11 under 35 U.S.C. § 112, first paragraph, for failure to comply with the written description requirement and, more specifically, for not showing how one of ordinary skill in the arts would include a damper in the auxiliary transmission of the present invention. The Applicant respectfully acknowledges and traverses the rejections of claims 9 and 11 under 35 U.S.C. § 112 for the following reasons.

First considering claim 9, independent base claim 8 is amended to more explicitly define the term "coupling zone" employed therein as the coupling zone element is a significant aspect of the present invention and is at least part of the basis by which other terms, such as "area" in claim 9, are defined. It must be noted that the term "coupling zone," as recited and defined in the specification and claims as originally filed and that this amendment is fully supported by the specification and drawings as originally filed, so that this amendment to claim 8 does not add any new matter and does not in any way alter the subject matter, content or scope of the present invention, the disclosure or the claims.

Having established a foundation from which to address the Examiner's rejection of claim 9, therefore, the Applicant submits the amendments to claim 9 herein above that address and overcome the Examiner's rejection of claim 9 for lack of definition of the term "area". Again, it must be noted that this amendment is fully supported by the specification and drawings as originally filed, so that this amendment to claim 9 does not add any new matter and does not in any way alter the subject matter, content or scope of the present invention, the disclosure or the claims.

It should also be noted that claim 12 is also amended to more explicitly point out the location of the hydraulic pump recited therein with respect to the coupling zone. Again, it must be noted that this amendment is fully supported by the specification and drawings as originally filed so that this amendment to claim 12 does not add any new matter and does not in any way alter the subject matter, content or scope of the present invention, the disclosure or the claims. The Applicant therefore respectfully requests that the Examiner reconsider and withdraw the rejection of claim 9 under 35 U.S.C. § 112.

Next, considering the Examiner's rejection of claim 11 under 35 U.S.C. § 112, first paragraph, Figs. 1 and 2 are amended in accordance with the relevant portions of the specification, that is, paragraph [033], to show typical arrangements for dampers between the electric motor and the housings of the auxiliary transmission and the main transmission unit to dampen vibration effecting the motor. There are a number of methods for implementing such damping elements, but all essentially comprise a resilient structural element capably of absorbing vibratory movement at the expected frequencies of vibration and, as such, need not be illustrated in detail. It must also be noted that in addition to showing the dampening elements in Figs. 1 and 2, reference numeral 33 are assigned to the dampening elements and paragraph [033] of the specification is amended to include the reference numeral 33 at the appropriate location. Again, it must be noted that this amendment is fully supported by the specification and drawings as originally filed, so that this amendment to Figs. 1 and 2 and to

paragraph [033] of the specification does not add any new matter and does not in any way alter the subject matter, content or scope of the present invention, the disclosure or the claims.

It is also be belief of the Applicant that these amendments address and overcome the grounds for the Examiner's rejection of claim 11 under 35 U.S.C. § 112, and the Applicant, therefore, respectfully requests that the Examiner reconsider and withdraw the rejection of claim 11 under 35 U.S.C. § 112.

Next considering the rejections of the claims over the prior art, claims 8-10 and 12-14 are rejected, under 35 U.S.C. § 102(b), as being anticipated by Williams '474. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

The Applicant concurs with the Examiner to a limited extent regarding the teachings of Williams '474 as Williams '474 also addresses an auxiliary transmission with a main transmission unit, so that there would be some general similarities. Williams '474, however, does not teach or suggest essential aspects of the present invention as recited, for example, in independent base claim 8.

For example, both the auxiliary transmission of the present invention and the transmissions shown by Williams '474 employ an electric motor to control the clutch of the auxiliary transmission. In the present invention, however, as is explicitly recited in claim 8, the electric motor is mounted in the coupling zone between the auxiliary transmission and the main transmission unit, that is, in the same zone or plane as the mechanical and structural connection between the auxiliary transmission and the main transmission unit.

According to the present invention, this structural arrangement significantly reduces the vibrational loading on the electric motor that arises during normal use of the auxiliary transmission by placing the center of gravity of the auxiliary transmission housing, and thereby of the auxiliary transmission itself, closer to the supporting connection between the auxiliary transmission and the main transmission unit.

As clearly shown, for example, in Fig. 2 of Williams '474, however, and in fundamental contrast from the present invention as recited in claim 8, Williams '474 places the electric motor controlling the auxiliary transmission clutch at the bottom of the upper part of the auxiliary transmission housing. Williams '474 thereby places the electric clutch control motor a significant distance away from any structural connection between the auxiliary transmission and the main transmission unit, which is the conventional practice. This arrangement interposes a significantly long structural "lever arm" between the electric motor and any possible support from the main transmission unit and would, in fact, exacerbate the vibration loading of and by the electric clutch control motor.

As a consequence, Williams '474 does not and cannot teach or suggest the above discussed primary aspect of the present invention as recited in base claim 8, that is, placing the electric clutch control motor in the coupling zone between the auxiliary transmission and the main transmission unit to reduce vibration loading on and of the electric motor.

It is, therefore, the Applicant's belief that Williams '474 does not and cannot teach the present invention as recited in claim 8 for the reasons discussed above. The Applicant, therefore, respectfully requests that the Examiner reconsider and withdraw the rejection of claim 8 over Williams '474, and allow claim 8 as amended herein above.

It must be further noted that this and other aspects of the present invention are recited in dependent claims 9-14 which, being dependent from claim 8, incorporate all recitations and limitations of claim 8 and are thereby patentably distinguished over and from the cited prior art for the same reasons that claim 8 is patentably distinguished over and from the cited prior art. It is, therefore, the Applicant's belief that Williams '474 does not and cannot teach the present invention as recited in claims 9-14 for the reasons discussed above. The Applicant, therefore, respectfully requests that the Examiner reconsider and withdraw the rejections of claims 9-14 over Williams '474, and allow claims 9-14 as amended herein above.

Additionally, according to claim 11 of the present invention, a damper element is arranged between the electric motor (8) and the housing (19) of main transmission (17) and according to claim 12, a hydraulic pump (14) is arranged outside (in front of) a bearing (15, 16) of the transfer transmission (1). Both features are significant to the present invention for achieving a reduction of vibrational loading on the electric motor and remaining constant delivery performance of the hydraulic pump (paragraph [027]). Furthermore, the distance between first and second bearings of input shaft (4) is reduced (paragraph [028]). Since those features are not described by the references cited, the present claims are new.

New independent claims 15 and 16 are believed to be allowable for similar reasons to those discussed above.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejection(s) should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the Williams '474 reference, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

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The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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